Amdt. Dated January 18, 2005

Preliminary Amendment to National Phase

in United States of International Application

No. PCT/JP03/08149 filed 26 June 2003

Amendments to the Specification:

Please replace the paragraph beginning at page 7, line 3, with the following rewritten paragraph:

--According to this structure, even when the first upper casing and the second lower casing are opened

or closed, the high antenna performance can be assured .--

Please replace the paragraph beginning at page 18, line 19, with the following rewritten paragraph:

--As apparent from Figs. 2A and 2B, when the plate shaped conductor 4 is selected, a gain in the

direction of Y is high. When the plate shaped conductor 5 is selected, the gain in the direction of -Y is

high. As described above, when the plate shaped conductor 4 or the plate shaped conductor 5 having a

higher gain is automatically selected by the high frequency switch 14, a directional diversity effect can

be obtained .--

Please replace the paragraph beginning at page 20, line 10, with the following rewritten paragraph:

--As apparent from Figs. 4A and 4B, when the portable radio device is held by the left hand, the

directivity 21 of the state that the plate shaped conductor 5 is selected has a higher gain on the XYXZ

plane. Further, when the portable radio device is held by the right hand, the directivity 22 of the state

that the plate shaped conductor 4 is selected has a higher gain on the XYXZ plane.--

Please replace the paragraph beginning at page 32, line 9, with the following rewritten paragraph:

-- The matching circuit 110 serves to match the impedance of the antenna element 101 with, for instance,

 50Ω and is connected to the antenna element 101 at a feeding point 108 through a feeder 109. The

matching circuit 110 is arranged at a position near the right side (Y) of the circuit board 103. The feeding

point 108 is arranged at a position near the right side (Y) by viewing the portable radio device from a

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front surface (X) side on the antenna element 101.--

Please replace the paragraph beginning at page 37, line 11, with the following rewritten paragraph:

-- As shown in Fig. 22, when the antenna element 101 side is selected by the high frequency switch 111,

since the lower case 105 is held by the hand similarly to the case of the left hand, the radiation of radio

wave from the circuit board 103 provided in the lower case 105 is decreased and the radiation from

electric current 115 on the antenna element 101 has a control. As a result, the vertically polarized wave

(Eθ) component on the horizontal (XY) plane is higher than that when the antenna element 102 is

selected. Accordingly, as shown in Fig. 23, in the directivity on the horizontal plan (XY plane), the

directivity 123 of the vertically polarized wave (E θ) component is higher in the direction of a -Y side

(right hand side) than the directivity 124 of the horizontally polarized wave (Eφ) component.--

Please replace the paragraph beginning at page 42, line 18, with the following rewritten paragraph:

--Fig. 31 shows a directivity of a dipole antenna on the YZ plane when the switch 223 is switched to

select the matching circuit 205 206. As shown by the directivity 240b in Fig. 31, an antenna gain in the

direction of -Y is higher by about 5dB than an antenna gain in the direction of Y. That is, the directivity

240b shows opposite characteristics to those of the directivity shown 240a in Fig. 31 28.--

Please replace the paragraph beginning at page 44, line 16, with the following rewritten paragraph:

--In the front surface side (a side in the direction of X) of the upper case 210 in the drawing, that is, on

a surface having a sound port 213 arranged, a metallic frame 214 is mounted. For the metallic frame 214,

light metal having high electric conductivity and high strength, for instance, magnesium alloy is used.

Such kind of metal is used so that the strength of the thin upper case 210 can be ensured and the metallic

frame 214 can function as an antenna element. The length £21 £26 of the long side of the metallic frame

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214 has, for instance, about 90 mm. The outer package surface of the metallic frame 214 is ordinarily

painted for dressing. Here, an explanation thereof is omitted.--

Please replace the paragraph beginning at page 45, line 24 and ending at page 46, line 7, with the

following rewritten paragraph:

-- In the hinge fittings 219a and 219b, tapped holes for attaching them to the lower case 211 are opened.

Further, in feeding terminals 220a and 220b, tapped holes are also opened. Attaching screws 229 are

attached to tapped hole parts 226 (Fig. 27-34) of the lower case 211 through the tapped holes of the

feeding terminals 220a and 220b and the hinge fittings 219a and 219b. According to this structure, the

hinge fittings 219a and 219b are respectively electrically connected to the feeding terminals 220a and

220b, and the lower case 211, the hinge fittings 219a and 219b and the feeding terminals 220a and 220b

are respectively mechanically fixed .--

Please replace the paragraph beginning at page 46, line 15, with the following rewritten paragraph:

--In the lower case 211, the matching circuit 222a is arranged in the left end (a side in the direction of

-Y) part of the upper end (the side of the direction of Z). The matching circuit 222a is connected to the

feeding terminal 220a. Further, the matching circuit 222b is arranged in the right end (a side in the

direction of Y) part of the upper end (the side in the direction of Z) of the lower case 211. The matching

circuit 222b is connected to the feeding terminal 220b. The feeding terminal 220a is connected to the

matching circuit 222a by, for instance, a spring contact or solder. Similarly, the feeding terminal 220b

is connected to the matching circuit 222b on the circuit board 221 provided in the lower case 211, by for

instance, a spring contact or solder. The long side L24 of the circuit board 21 22 has, for instance, about

90 mm.--

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Please replace the paragraph beginning on page 47, line 13, with the following rewritten paragraph:

--According to the above-described structure, the metallic frame 142 214 and the hinge portion 212b and

the ground pattern on the circuit board 221 operate as a dipole antenna. At this time, the metallic frame

214 and the hinge portion 212b operate as a first antenna element having the length of L25 (for instance,

110 mm). The matching circuits 222a and 222b match the impedance of the first antenna element with

the input impedance (ordinarily, 50Ω) of the radio circuit 224. Further, the ground pattern on the circuit

board 221 having the length of L24 operates as a second antenna element. Here, a gap G between the

hinge fittings 219a and 219b and the ground pattern on the circuit board 21 221 is desirably wide as much

as possible (for instance, 2 mm or more, or when the portable radio device is used with 800 MHz, $\lambda/20$

or more) from the viewpoint of an antenna performance.--

Please replace the paragraph beginning at page 51, line 7, with the following rewritten paragraph:

--In Fig. 35, when the switch 227a is turned ON and the switch 227b is turned OFF, the directivity of an

antenna is high in a gain in the direction of Y like the directivity 250a 260a shown in Fig. 36. On the

contrary, when the switch 227a is turned OFF and the switch 227b is turned ON, the directivity of an

antenna is high in a gain in the direction of -Y like the directivity 250b 260b shown in Fig. 37. Further,

when both the switch 227a and the switch 227b are turned OFF, an intermediate directivity of the

directivity 250a 260a and the directivity 250b 260b is obtained. When both the switch 227a and the

switch 227b are turned ON, antenna characteristics are deteriorated. Therefore, the control operation of

the control circuit 225 is desirably set not to select this state.--

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